

5.4.13 Other Mining-Related Sites

In addition to the 12 undisclosed Kerr-McGee mining sites heretofore discussed in **Section 5.4**, there are an additional 656 undisclosed mining-related sites in Kerr-McGee's portfolio of environmental legacy sites (collectively referred to herein as the "Other Mining-Related Sites") that were not disclosed in Schedule 2.5(a) of the Master Separation Agreement (See **Appendix E-12**). For a variety of reasons, discussed below, Roux Associates has not estimated the present value of the cost for necessary and appropriate environmental response actions remaining at the Other Mining-Related Sites as of November 2005. However, that does not mean it is Roux Associates' opinion that the present value of the cost for necessary and appropriate environmental response actions remaining at the Other Mining-Related Sites as of November 2005 is \$0. On the contrary, the present value of the cost for necessary and appropriate environmental response actions remaining at the Other Mining-Related Sites as of November 2005 is, more likely than not, millions of dollars. Roux Associates has conservatively elected not to quantify the amount at this time, for the reasons discussed below.

As discussed in the introduction to **Section 5.4**, a total of 675 Kerr-McGee mining-related sites were determined to constitute Kerr-McGee's environmental legacy portfolio based upon documents reviewed by Roux Associates. These are listed in **Appendix E-2**. Of these 675 mining-related sites, four were discussed in **Section 4.5**, three were discussed in **Section 5.3**, and 12 sites have heretofore been discussed in **Section 5.4**. The remaining 656 sites constitute the Other Mining-Related Sites. The present value of the cost for necessary and appropriate environmental response actions remaining at these sites as of November 2005 was not estimated by Roux Associates for a variety of reasons. As shown in the table below, costs for future response actions at some sites have been and/or will be borne by other parties pursuant to government programs (e.g., UMTRCA) or contractual agreements (e.g., PSAs). For other sites, response action costs were not estimated because of location (i.e., outside of the United States) or because Roux Associates deemed it unlikely that Kerr-McGee would have to incur response action costs in the future (e.g., Petrotomics site, coal sites). For the majority of sites, however, costs for necessary and appropriate environmental response actions were not estimated because site-specific information with which to develop cost elements was lacking and Roux Associates did not have sufficient time to conduct site inspections at these sites to determine whether or not historical mine features are present.

Summary of Other Mining-Related Sites (See Appendix E-12)			
Site Category	Sites Included	Reason for Not Estimating Response Action Costs	Comments
UMTRCA Title I sites (former uranium mills)	<ul style="list-style-type: none"> Shiprock, NM Gunnison, CO Lakeview, OR 	Costs borne by federal and state governments pursuant to UMTRCA	Kerr-McGee cost \$0 as long as costs for site cleanup continue to be borne by federal and state governments
Sites for which Kerr-McGee was indemnified for future response action costs	<ul style="list-style-type: none"> Sequoyah Fuels Brewster Phosphates (3 sites; see Appendix E-12) Certain uranium mines and explorations sites in Wyoming and New Mexico (123 sites; see Appendix E-12) 	Kerr-McGee indemnified from future response action costs via PSA or other contractual agreement	Kerr-McGee cost \$0 as long as indemnifying parties remain solvent;
Sites for which Kerr-McGee was not contributing to site cleanup costs in 2005	<ul style="list-style-type: none"> Petrochemicals/Shirley Basin South Disposal Site 	Kerr-McGee sold interests in site operations in 1974; no subsequent claims for cost-sharing identified in site documentation; ownership and long-term custody of site transferred to USDOE in March 2005	Kerr-McGee cost likely \$0 because the site under USDOE custody as of November 2005
International Mining Sites	<ul style="list-style-type: none"> 11 sites (see Appendix E-12) 	Not subject to laws of United States	
Coal sites	<ul style="list-style-type: none"> 111 sites (see Appendix E-12) 	Costs for reclamation covered by bonding or state abandoned mines programs	Kerr-McGee cost likely \$0 because Kerr-McGee was not operating these mines (as of November 2005) and current operations are bonded; CERCLA action at abandoned coal mines unlikely
Other uranium mines/exploration sites	<ul style="list-style-type: none"> 178 sites (see Appendix E-12) 	Insufficient site-specific information	Kerr-McGee identified as past owner/operator of several mines; waste piles likely still present at mines; minimum cost for uranium mines with waste rock piles is \$500K (see introduction to Section 5.4)
Other non-uranium mines/exploration sites	<ul style="list-style-type: none"> 225 sites (see Appendix E-12) 	Insufficient site-specific information	Kerr-McGee identified as former operator of several mines in USGS database; past operator status sufficient to be named PRP if response actions required (see Section 5.4.8 [Mansfield Canyon])

As of November 2005, necessary and appropriate environmental response actions at any of the latter two categories of sites (i.e., other uranium and non-uranium mines/exploration sites) that had ever been owned and/or operated by Kerr-McGee would have included, at a minimum, an inspection of each of the sites to evaluate the potential for environmental impacts associated with Kerr-McGee and/or historical mining-related activities. Conservatively, Roux Associates has estimated that such an inspection would cost at least \$5,000 per site¹ (in 2005 dollars), meaning that the minimum undiscounted cost for these two categories of sites (assuming all 403 sites had been owned and/or operated by Kerr-McGee at one time) would be \$2.0M (equal to 403 x \$5,000). However, as Roux Associates could not locate sufficient site-specific information to identify which sites had in fact been owned and/or operated by Kerr-McGee (versus those which were, for example, prospects that Kerr-McGee researched but never took title to or otherwise owned or operated [e.g., leased]), Roux Associates is presently unable to accurately estimate inspection costs for these 403 sites.

In addition to the costs for site inspections, costs for remedial response actions for at least several of the 178 other uranium mines/exploration sites were known or knowable as of November 2005 based on the limited research into these sites conducted by Roux Associates. Specifically, it is Roux Associates' opinion that 1) response actions are necessary at those uranium mines at which Kerr-McGee produced ore and 2) at least some portion of the costs would be apportioned to Kerr-McGee. As evidenced at the Riley Pass site (see **Section 4.5.4**), response action costs for even small uranium mines (e.g., Riley Pass Bluffs C, D, and E) can approach \$500K (undiscounted). In addition, the Mansfield Canyon site (and the events that unfolded there) demonstrated that Kerr-McGee could be named a PRP for CERCLA response actions in historical mining areas even if Kerr-McGee only conducted exploration activities there. However, because the available information regarding these types of sites is so limited and/or Roux Associates lacked sufficient time to develop opinions with respect to these sites, at this time Roux Associates is not able to quantify either the response action costs for these sites or Kerr-McGee's apportioned share.

¹ The scope of work included in the undiscounted \$5,000 cost estimate includes preliminary research, travel to the site, a one-day inspection of the site performed by one person, and preparation of a summary memorandum.

As a result of the foregoing, Roux Associates has not estimated the present value of the costs for necessary and appropriate environmental response actions remaining at the Other Mining-Related Sites as of November 2005.